4042

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

State: R. I.

11—5613

DESCRIPTIVE REPORT.

Hyd. Sheet No. 4042

LOCALITY:

Block Island Sound

West of Block Island

1919

CHIEF OF PARTY:

F. B. T. Siems

4042

Descriptive Report
to
Accompany Hydrographic Sheet No. 4042.

Field Letter "D". Scale 1/40,000.

Limits: The areas dragged by Wire Drag Party No. 1, 1918, roughly comprises the western part of offshore area of Block Island Sound, between Block Island and Fishers Island. Wire Drag Party No. 5, executed the eastern part of the above area forming a junction with work of Party No. 1, and also accomplished some dragging between Fishers Island and Gardiner Island. This report covers operations of Wire Drag Party No. 1 in 1918 and is indicated on the sheet by black inked position numbers and letters; those of Party No. 5 are indicated in red ink.

Color scheme for showing effective drag depths are standard for 1918 work, that is:

0-19	feet	is	shown	brown
20-29	"	"	"	yellow
30-39	"	"	"	blue
40-59	"	"	"	red
60-79	"	"	"	purple
80 and above		"	"	orange.

Instructions from the Superintendent of April 13, 1918 (to J. H. Hawley) and supplemental instructions of June 7, 1918 and August 22, 1918, were followed in executing these surveys.

Tidal reductions for drag depths and soundings were made, using Stonington observation for the purpose.

Control: Practically all of the signals used in the work are determined by triangulation. A set of three prominent signals for a strong three point position were readily observable in moderately clear weather in any part of area covered. The positions on E day from 1 to 12 are probably 70 meters or less in error, brought about by the use of weak fixes in hazy weather. When covering the splits along the edges of this strip good overlap should be made. The descriptions of triangulation stations recovered and established have been forwarded to the office and should be consulted for future surveys in this locality.

Plotting was done by Mr. Norman Duckworth, Apprentic Draftsman and his experience in this class of work is rather limited. During the field season the position of drags were plotted under my supervision, the subdivision of effective depths were made with the assistance of Mr. John A. Daniels at the Boston Field Station.

Methods: The greater amount of work being long drag operations, the method of obtaining independent positions in both launches was employed. Dragging was done in the direction of the current.

Currents: In the area dragged it was noted that the currents run in a general E. & W. direction very little influence from the tides entering and leaving between Montauk Point and Block Island was noticed. Even on the southern most strip little allowance in steering was found necessary to counteract currents from Montauk Point. The various stages of the current at Watch Hill occurred about one hour earlier than the corresponding predicted changes for The Race.

Launches and Equipment: The launches used for this work gave considerable engine trouble, causing loss of control of maneuvering the drag. Insufficient equipment caused by war conditions prevented the use of a drag longer than 9000 feet.

Splits are indicated in pencil on the sheet.

Results of the Survey shows that the area dragged by Party No. 1, is entirely free from dangers to navigation. Two discoveries made by the wire drag consist of sand shoal of 85 feet in charted depths of 102 to 120 fathoms in latitude 41° - 12' longitude 71° - 53'; and of a wreck supposed to be that of the passenger Steamer "LARCHMOUNT" off Watch Hill with a safe depth of ft. over it. (See paragraph 6a, Shelowitz, this report)

Respectfully submitted,

F. B. Williams

Chief, Wire Drag Party No. 1.

Washington,
Mar. 10, 1919.

Descriptive Report
to accompany
Hydrographic Sheet # 4042
Wire DragGParty No.1, 1919

Limits: The work accomplished during 1919 includes the completion of offshore unfinished drag areas between Watch Hill and Block Island, in Block Island Soundm and some offshore dragging south of Block Island.

Tidal Reductions for drag depths and soundings were made using Pt Judith or Block Island observations depending upon the locality . In cases where Pt. Judith automatic tide gauge readingswere doubtful, those of Block Island were used for these reductions.

Control Additional objects were located onthe Rhode Island shore by Triangulation and by sextant cuts.

Methods. The method of obtaining independent positions in each launch was generally followed. The party was handicapped by the lack of expaper-ienced officers. The hydrographic information in this locality id very meager, and this has caused the loss of considerable time in going aground in unimportant places. Dragging was done in the direction of current.

Results of the survey thatcthediareas dragged along the Rhode Island shore are more or less covered by boulders. The areas offshore are free from all obstructions. A sounging of ~~44~~ 48 ft. reduced, was obtained from the guide launch whild following the 60 ft Curve along the Rhode Island shore. This locality requires a detailed hydrographic survey, before efficient wire drag can be done in the remaining unfinished areas along the R. I. shore.

See Vol. 1
G"day 89 48
A.L.S.

Respectfully submitted
F B Weems
Chief, Wire Drag Party No. 1

Referring to Circular #2. Aug 30, 1919, the work on and approved
smooth sheet could not be examined for the reason
that Chief of Party was transferred to another
Party before plotting was completed.
F B W

TABLE OF STATISTICS WIRE DRAG SHEET # 4042 Year 1919

WIRE DRAG PARTY# 1

DAY	DATE	LENGTH OF DRAG	MILES STA.	POSITIONS	RETAINED SOUNDINGS
	1919 July 21	8000	4.0	19	0
	29	8500	9.2	36	0
	30	8000	7.0	34	0
	Aug. 6	8500	0	4	0
	9				
	11	5000	2.7	19	2
	12	5000	3.5	26	1
	13	9000	7.5	25	0
	15	9000	7.3	28	0
	21	7000	3.0	12	0
	26	9500	2.0	21	1
	28	8500	7.3	27	0
	29	7500	7.0	29	0
0	Oct 25	3000 7500	6.5	35	0
P	29	9000	4.1	26	0
		Totals	71.1	341	4

Descriptive Report.

Hydrographic Sheet No. 4042.

Wire Drag Party No. 1.

Locality of Survey. The work completed on this sheet during the season of 1919, was in Block Island Sound between Block Island and the Eastern limits of that executed by this party and No. 8, in 1918.

Instructions from the Superintendent were dated June 18,1919.

Tidal observations, for the computations of effective drag depths and reductions for soundings, were made from readings obtained at the automatic tide station at Pt. Judith, R. I. and staff readings at Block Island. Notes in the records,at the beginning of each day, indicate the readings used.

Control. Only a few new signals were employed in this work and with the exception of one(namely Cistern) they were afterwards located by triangulation.

Methods. In this work both long and short drags were used.

Results of Survey. The contour of the bottom was found to agree quite well with the information as given on the chartand in only a few places were shallower depths found. The difference was slight in every case. No dangerous obstructions or shoals were found andthe indications are that this locality is free from them.

Respectfully submitted,

Thomas L. Gallen

Jr. H&G. Engineer.

TABLE OF STATISTICS FOR SHEET NO.4042. YEAR. 1919.

WIRE DRAG PARTY NO. 1.

DAY	DATE	LENGTH OF DRAG	MILES STA.	POSITIONS	RETAINED SOUNDINGS
A	July, 21	8000 ft.	4.0	20	0
B	" 29	8500 "	9.2	36	0
C	" 30	8000 "	7.0	25	0
D	Aug 6	8500 "	0.0	0	0
E	" 9	-----	0.0	16	0
F	" 11	5000 "	2.7	18	13
G	" 12	5000 "	3.5	17	1
H	" 13	9000 "	7.5	24	0
J	" 15	9000 "	7.3	29	0
K	" 21	7000 "	3.0	12	0
L	" 26	9500 "	2.9	18	1
M	" 28	8500 "	7.3	26	0
N	" 29	7500 "	7.0	28	0
O	Oct. 25 " "	7500 " 3000 "	6.5	35	0
P	" 29	9000 "	4.1	26	0
		Totals	81.1	330	15

ADDRESS THE SUPERINTENDENT
U. S. COAST AND GEODETIC SURVEY

AND REFER TO NO. 41-EMK

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

March 23, 1920.

Division of Hydrography and Topography:

Division of Charts: ✓

Tidal reductions have been approved in
4 volumes of Wire Drag and Sounding records for

HYDROGRAPHIC SHEET 4042 Add.

Block Island, Rhode Island
F.B.T. Siems in 1919

Plane of reference is
Mean Low water, reading

1.2 ft. on tide staff at Point Judith, R.I.
2.7 ft. on tide staff at New Harbor (Great Salt Pond), Block Island, R.I.

Condition of records; satisfactory.

G. Rude

Chief, Section of Tides
and Currents.

Forwarded
H. G. Dorsey

Chief, Division of Hyd'y & Top'y

E.O.E.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 4-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON November 3, 1925.

SECTION OF FIELD RECORDS

Report on Wire Drag Sheet H. 4042

Block Island Sound

Surveyed in 1918 and 1919

Instructions dated April 13, 1918 (Hawley), April 30, 1918 (Siems), June 7, 1918 (Daniels), September 3, 1918 (Daniels), June 18, 1919 (Siems).
Chiefs of Party, F. B. T. Siems, J. A. Daniels.

Surveyed by F. B. T. Siems, J. A. Daniels.

Protracted and inked by N. Duckworth, S. M. Ferguson.

Verified and Area and Depth Sheet by A. L. Shalowitz.

Tracing by J. C. MacNab.

1. The work on this sheet was executed by J. A. Daniels in 1918 and by F. B. T. Siems in 1918 and 1919. Daniels' work is indicated by red inked position numbers while Siems' 1918 work is indicated by black inked position numbers and his 1919 work by purple inked position numbers.

2. The records conform to the requirements of the General Instructions.

3. The methods and character of operations fulfill the requirements of the General Instructions.

4. The depth of dragging satisfies the specific instructions.

5. The extent of dragging satisfies the specific instructions except that there still remain areas in Block Island Sound that have not been dragged. These, however, will be taken up when the last of this series of sheets are reviewed. (See H. 4041 or H. 4005). Also the area around Southwest Ledge where the Steamer Alloquash reported as having struck was not covered by this party, although in 1912 the drag party operating around this area (H. 3380) grounded at 27 ft. but obtained no less than 33 ft. The grounding occurred on a charted 30 ft. spot (from H. 2313) and was subsequently cleared by a 27 ft. drag. A 27 ft. sounding should be charted in place of the 30.

GPO

6. The least water was found over all shoals discovered except as follows:

a. The 74 ft. sounding (grounding depth) in lat. 41° 16' 06" long. 71° 49 1/2' was cleared by a 65 ft. drag. The least water obtained here by sounding was 78 ft. The shoal is surrounded by depths ranging from 100 to 130 feet. (Presumed to be the "Larchmount") (See Field Letter "D", last paragraph, by Siems, front of this report)

b. The 48 ft. sounding in lat. 41° 18 1/2', long. 71° 48' was not cleared. This is not a detached shoal and lies in general depths of 36 to 57 feet.

c. The 70 ft. sounding (grounding depth) in lat. 41° 19' long. 71° 42 1/2' was not cleared. The least water obtained by sounding was 78 ft. A 74 ft. sounding is now charted close by, but this is apparently an error and should be 90 instead. (See H. 1529[b]). H-1529 b not in this immediate vicinity. H-1529 a shows a 15 Fm. depth in the vicinity. S. Rose 7-19-'66

d. The 33 ft. sounding (grounding depth) in lat. 41° 06 3/4' long. 71° 40' was not cleared. This lies very close to the bell buoy on Southwest Ledge where 37 is now charted.

e. The 34 ft. sounding on the same ledge was not covered, but there is less water charted close by.

f. The 82 ft. sounding in lat. 41° 10', long. 71° 52' was not cleared on this sheet. A split in the work was left around here. Although it is shown as covered by H. 3907, it should be redragged inasmuch as it lies close to the end of the drag of H. 3907.

g. The 40 ft. sounding in lat. 41° 09 1/2', long. 71° 05' was not cleared. This is a very important shoal lying about 3 miles N. x E. of Gardiners Island. It is surrounded by deeper water and should be dragged over whenever work is done again in this locality.

7. The overlaps within the sheet are generally sufficient except as shown on the Area and Depth Sheet.
No junction was effected with H. 4098.
The junctions with H. 3907 and H. 3880 are only complete in spots. No attempt will be made here to point out where the work is incomplete. For this reference should be made to the A. and D. sheet and also to copy of chart 1211 on file in Field Records Section upon which has been outlined the limits of the various sheets in this locality. The junctions with H. 4043, H. 4041 and H. 4005 will be taken up in the reviews of those sheets.

8. There are several splits on this sheet that should be covered whenever work is resumed here. The most important of these are the two splits in the vicinity of lat. 41° 13', long. 71° 56' and the split in the vicinity of lat. 41° 10', long. 71° 52'. In the latter place the drag grounded and 82 ft. was obtained.

9. This sheet is far from being complete and additional work will be required to make the dragged area in Block Island Sound continuous. Whenever drag operations are resumed here consideration should be given to all the points mentioned in the preceding paragraphs and a reference should be made to the special copy of chart 1211 mentioned in Paragraph 7.

10. Numerous changes had to be made on account of poor plotting. A frequent error was the plotting of depth changes from the wrong end.

    This sheet does not incorporate the rule of forty. No changes were made on that account except where changes had to be made anyway.

    The area and depth sheet shows variations in depth for every foot up to 60 ft. and thence every five feet.

11. There is no verification report for this sheet, the substance having been incorporated in this review.

12. Reviewed by A. L. Shalowitz, October, 1925.

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

WIRE - DRAG

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4042 Field letter "D"- incomplete

State . New York & Rhode Island . . . . . .

General locality . New England Coast . . . . . .

Locality . . Block Island Sound . . . . . .

Chief of party . F.B.T. Siems . . . . . .

Surveyed by . . F.B.T. Siems . . . . . .

Date of survey . August 15, 1918 to November 7, 1918 . . . .

Scale . 1/40,000 (2) 1:50,000 is scale of smooth sheet.

Soundings in . feet . . . . . .

Plane of reference . Mean low water . . . . . .

Protracted by Duckworth . Soundings in pencil by . . . . .

Drag depths
Inked by . Duckworth . . . Verified by . . . . . .

Records accompanying sheet (check those forwarded):

Des. report, ... Tide books, ... Marigrams, ...1... Boat sheets,

none Sounding books, ...2... Wire-drag books, ...1... ~~Photographs~~ Envelope containing drag strips.

Data from other sources affecting sheet Wire drag work J.A Daniels 1918, plotted on same sheet; J.H Hawley 1916; N.H Heck 1912 - between Montauk Pt & Block Island; - triangulation 1918 - F.B.T.S.

Remarks: This sheet can be used for future wire drag work in this locality.

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4042

State . Rhode Island, Connecticut, and New York. . . . . .

General locality . . New England Coast . . . . . .

Locality . Block Island and Long Island Sounds. . . . . .

Chief of party . F.B.T. Siems, H.&.G. Engr. . . . . .

Surveyed by Wire Drag Party No.1. . . . . .

Date of survey . Season of 1919 . . . . . .

Scale . . . . 1.:.50'000 . . . . . .

Soundings in . . . . Feet. . . . . .

Plane of reference . . . Mean Low Water. . . . . .

Protracted by . N.D. . . . Soundings in pencil by . N.D. .

Inked by . . . N.D. . . . . Verified by . . . . . .

Records accompanying sheet (check those forwarded):

Des. report, 2 Tide books, 5 Marigrams, 2 Boat sheets,

1 Sounding books, 3 Wire-drag books, ... Photographs.

Data from other sources affecting sheet . . . . . .

Remarks: Work of W.D.Party No1, season of 1918, and work of W.D.Party No.5, season of 1918, is also plotted on this sheet.

DEPARTMENT OF COMMERCE

U. S. Coast and Geodetic Survey

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H Y D R O G R A P H I C T I T L E S H E E T

- - - - - - - - - - -

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey,

Register No. **4042** 4 (Field)

State Rhode Island.

General Locality Block Island Sound.

Locality West of Block Island.

Chief of Party J.A.Daniels.

Surveyed by Wire Drag Party #5.

Date of Survey 1918

Scale 1 : 50,000

Soundings in Feet.

Plane of reference Mean low water.

Protracted by S.M.Ferguson Soundings in pencil S.M.F.

Inked by S.M.Ferguson Verified by

Records accompanying sheet (check those forwarded):

Des. report,____ Tide books, ✓ Marigrams,____ Boat sheets, ✓ 3

Sounding books, ✓ 1 Wire-drag books, ✓ 2 Photographs,____

Data from other sources affecting sheet____

Remarks:

4042

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

11—5613

State: Rhode Island

DESCRIPTIVE REPORT.

Hyd. Sheet No. 4042

LOCALITY:

Block Island Sound.

West of Block Island.

1918

CHIEF OF PARTY:

John A. Daniels.

4042

DEPARTMENT OF COMMERCE.

U.S. COAST AND GEODETIC SURVEY.

E.Lester Jones,Superintendent.

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO.4.

4042

J.A.Daniels,Jr.H.& G.E.
Chief of Party.

1918.

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHHET NO.4. 4042

J.A.Daniels,Jr.H.& G.E.
Chief-of-Party.

1918.

LIMITS;SCALE USED,PURPOSE;ETC.

Sheet four was originally made up for Wire Drag Party #1 and shows their work in Block Island Sound.As Party #5 worked in this locality at the same time it is best to plot all the work on one sheet.Dragged areas done in previous years are shown by dotted red lines.Also the limits of work done on other sheets this season ,to the northward of Block Island have been transferred.A progress sheet has thus been developed of the entire work in Block Island Sound.

The most important portion of this work was directly west of Block Island.It extended from a distance of about two miles from Block Island to the work of Party #1.A small amount of work was done in the western part of the sound about southeast from Little Gull Island.Also some special work was done on Southwest Ledge.

The work was done upon two different boat sheets;Southwest Ledge upon scale upon a scale 1:20,000 and the remainder 1;40,000;while the smooth sheet is 1:50,000.The scale of 1:50,000 was adopted by the other party and made a sheet of good dimensions.Also as the work in general embraced fairly long drags; it is clearly defined when thus plotted.

The purpose of this work was to verify the depths of the water as shown by the soundings on the chart.Within areas outside the ten fathom curve,the drag was set to within 10 to 20 ft. from the bottom,and a maximum effective depth of 100 feet was used.The general effective depth was 50 feet in areas with depths less than 10 fathoms.In this case it was the usual policy to drag to within 2 to 4 feet from the bottom and to determine the least depths on all shoals found in this manner.

over

SHOALS.

In the western part of Block Island Sound a least depth of 40 feet was found at a distance of about two miles, south-south-east of Little Gull Island. This uncharted shoal was not dragged over and is very likely to have depth somewhat less than that found. It is a boulder covered shoal of comparatively large extent.

SURVEY METHODS.-Control, party, etc.

The party this season was very nearly an average wire drag party. It consisted of a Chief of Party, an executive officer 3 aids, 1 deck officer, 2 apprentice draftsmen, 1 drag master, and 10 hands. Some of the signals of Wire Party #1 were used and in most cases their hydrographic names were not changed. Where however there was an addition, change, or confliction, a note was made on the sheet or in the records.

Guiding launch control and control from both boats were used about equally for the work on this sheet. That at the western end of Block Island Sound was fairly long drag work which, it is interesting to note, was done with guiding launch control. An 8900 foot drag was controlled in this manner, with a towline base of 130 meters. The distances were frequently checked by independent positions upon the end launch and were found to be surprisingly accurate.

Respectfully submitted,

John A. Daniels.

Chief of Party.

STATISTIC SHEET. (Sheet 4)

4042

Day.	NO.Miles.	Soundings.	Positions.	Angles.
A	1.1	3	9	60
B	5.3	0	25	175
C	2.3	1	22	130
D	7.0	0	30	218
E	9.7	0	40	274
F	4.0	0	23	92
G	7.0	0	28	112
H	3.0	0	18	108
J	8.0	5	25	146
K	3.5	0	17	98

ADDRESS THE SUPERINTENDENT
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 5-ACC

FIELD RECORDS (C)

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

HYDROGRAPHY ETC., (HT)

CHARTS (H)

Division of Hydrography and Topography:

Division of Charts:

SECTION OF FIELD RECORDS
MAY 7 1919
RECEIVED

Tidal reductions have been approved in
3 volumes of Wire Drag and Sounding records for

HYDROGRAPHIC SHEET 4042

Block Island Sound, New York and Rhode Island
F. B. T. Siems and J. A. . . Daniels in 1918.

Plane of reference is
Mean low water, reading

1.8 ft. on staff at Chesebro's Wharf, Stonington
2.3 ft. " " " Little Gull Island
1.6 ft. " " at Breakwater, Great Salt Pond,
Block Island.

Chief, Section of Tides
and Currents.

by	Date	Sig. & Comp.	Dist. entered	Dist. check	1st of sup. ent.	1st of sup. check	Corr. Enter	Corr. Check	Dr. Dth. Ent.	Dr. Dth. Ch.	Red. Ent.	Red. Check	Eff. Dth. Ent.	Eff. Dth. Ch.	Eff. Dth. Entered	Eff. Dth. Checked	Pos. Plotted			Area subdiv.		Trans. & Ink	Comp. Chart
A	9/25	GRK RLH W/ GRK	JAD	GRK RLH	LAE	RLH	RLH	LAE	RLH	LAE	RLH	LAE	RLH	LAE	RLH	GRK	SME			SME		SME	
B	10/2	APR	/	/	RLH	APR	APR	N.C.	APR	N.C.	APR	N.C.	APR	N.C.			SME			SME		SME	
C	10/4	RLH GRK	RLH	RLH GRK	LAE	N.C.	LAE	N.C.	LAE	N.C.	LAE	N.C.	LAE	N.C.	RLH	GRK	SME			SME		SME	
D	10/8	W/ GRK RLH	/	/	LAE	N.C.	LAE	N.C.	LAE	N.C.	LAE	N.C.	LAE	N.C.			SME			SME		SME	
E	10/9	W/ GRK RLH	/	/	LAE	N.C.	LAE	N.C.	LAE	N.C.	LAE	N.C.	LAE	N.C.			SME			SME		SME	
F	10/22	W/ SME RLH	/	/	LAE	N.C.	LAE	N.C.	LAE	N.C.	LAE	N.C.	LAE	N.C.			SME			SME		SME	
G	10/23	W/ APR GRK	/	/	LAE	RLH	LAE	RLH	LAE	RLH	LAE	RLH	LAE	RLH			SME			SME		SME	
H	11/7	APR	GRK	LAE	LAE	N.D.	LAE	N.D.	LAE	N.D.	LAE	N.D.	LAE	N.D.			SME			SME		SME	
J	11/8	LAE	GRK	LAE	LAE	N.D.	LAE	N.D.	LAE	N.D.	LAE	N.D.	LAE	N.D.			SME			SME		SME	
K	11/12	APR	GRK	LAE	LAE	N.D.	N.D.	GUS	N.D.	GUS	N.D.	GUS	N.D.	GUS			SME			SME		SME	

Wire Drag Survey of Block I Sound & West of Block I)

Scale 1:50,000 Season of 1918

Surveyed by A.A. Daniels, Jr. H. & G.E.

This Progress Chart, checked to show the condition of the office work, should be forwarded to the office with the records.

11—6061

Applied to ch 362 RDG 10/27/49